

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 1
(1 point)

Given the following on Unit 1:

- Unit is operating at 100% RTP
- Slave relay testing is being performed and a procedural error results in the inadvertent closure of 1RN-277B (RB NON ESS RET CONT OUTSIDE ISOL)

NC Pump trip criteria will be met when stator winding temperature rises to a minimum of _____ °F

Which ONE of the following completes the statement above?

- A. 235
 - B. 280
 - C. 300
 - D. 311
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 2
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- 1A S/G has received a P-14 signal

Based on the conditions above:

- 1) The _____ valves will CLOSE.
- 2) To regain control of Feedwater Isolation components, the reactor trip breakers _____ required to be CLOSED.

Which ONE of the following completes the statement above?

- A. 1. Main Steam Isolation
 2. are NOT
 - B. 1. CF to CA Nozzle Isolation
 2. are NOT
 - C. 1. Main Steam Isolation
 2. are
 - D. 1. CF to CA Nozzle Isolation
 2. are
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 3
(1 point)

Given the following:

- Both units are operating at 100% RTP
- An instrument air system leak develops in the Unit 1 Turbine Building
- The Diesel VI Compressors (G & H) "AUTO/OFF-RESET" selector switches are in 'AUTO'

The following indications are observed in the Control Room:



Based on the indications above:

- 1) 1VI-1812 (VI Air Dryer Bypass Filter Isol) is _____.
- 2) The Diesel VI Compressors (G & H) _____ received a start signal.

Which ONE of the following completes the statements above?

- A. 1. OPEN
2. have
- B. 1. CLOSED
2. have
- C. 1. OPEN
2. have NOT
- D. 1. CLOSED
2. have NOT

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 4
(1 point)

Given the following on Unit 2:

- Unit is operating at 100% RTP
- An auto make-up to the VCT is in progress
- VCT level is 60% and rising

Subsequently:

- Annunciator 2AD-7/D-3, VCT ABNORMAL LEVEL alarms

Based on continued level rise, the Annunciator Response for 2AD-7/D-3 will ensure that 2NV-137A (U2 NC Filter OTLT to VCT) is aligned to the ____ (1) ____.

2NV-137A will be in FULL DIVERT at ____ (2) ____ %.

Which ONE of the following completes the statements above?

- A. 1. RHT
 2. 66
 - B. 1. NCDT
 2. 66
 - C. 1. RHT
 2. 96
 - D. 1. NCDT
 2. 96
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 5
(1 point)

Given the following conditions on Unit 2:

- The unit is in solid operations while cooling down
- Both trains of ND are in service
- 2A NV pump is in service
- ND LETDOWN is in-service.

Based on the conditions above, a loss of VI to valve _____ would cause NC system pressure to increase.

Which ONE of the following completes the statement above?

(Consider each separately)

- A. 2RN-89A (RN to A KC Hx Control)
 - B. 2KC-57A (2A ND Heat Exchanger Cooling Water Control)
 - C. 2ND-29A (2A ND Hx Outlet Isol)
 - D. 2ND-34 (A & B ND Hx Bypass)
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 6
(1 point)

Given the following on Unit 1:

- Unit was operating at 100% RTP
- A Reactor Trip/Safety Injection occurs
- The following trend is observed in the Control Room:

<u>Time after Trip/SI</u>	<u>NC Pressure</u>
1 minute	1800 psig
4 minutes	1600 psig
8 minutes	1400 psig
10 minutes	1100 psig

Based on the conditions above, Safety Injection Pump (NI) motor amps will START to ____ (1) ____ between ____ (2) ____ minutes.

Which ONE of the following completes the statement above?

- A. 1. lower
 2. 4-8
 - B. 1. rise
 2. 4-8
 - C. 1. lower
 2. 8-10
 - D. 1. rise
 2. 8-10
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 7
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- The following annunciators are received:

1AD-6 D-9 (PRT HI PRESS)
1AD-6 E-9 (PRT ABNORMAL LEVEL)

- The following OAC Alarms are received:

U1 PZR RELIEF TANK LEVEL HI-HI
U1 PZR RELIEF TANK PRESS HI

- PRT pressure is 9 PSIG and RISING SLOWLY
- PRT level is 95% and RISING SLOWLY

The PRT rupture disc is designed to discharge to Containment when PRT pressure rises to a MAXIMUM of ____ (1) ____.

To prevent PRT rupture disc operation due to the conditions above, the operating crew must FIRST ____ (2) ____.

Which ONE of the following completes the statements above?

- A. 1. 100 PSIG
 2. drain the PRT to the NCDT
 - B. 1. 85 PSIG
 2. drain the PRT to the NCDT
 - C. 1. 85 PSIG
 2. vent the PRT to the Waste Gas system
 - D. 1. 100 PSIG
 2. vent the PRT to the Waste Gas system
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 8
(1 point)

Given the following on Unit 1:

- Unit is in Mode 5
- NC system is in a water solid condition
- 1A ND is in service
- 1B NV pump is in service
- 1NV-121 (UNIT 1 ND LETDOWN CONTROL) is THROTTLED to 50% to maintain letdown flow from ND
- 1NV-238 (UNIT 1 CHARGING HDR CONTROL) is in MANUAL
- All plant parameters are stable

If VI were lost to 1NV-121, NC system pressure would (1) .

If VI were lost to 1NV-238, NC system pressure would (2) .

Which ONE of the following completes the statements above?

(Consider each failure separately)

- A. 1. rise
 2. lower
 - B. 1. lower
 2. lower
 - C. 1. rise
 2. rise
 - D. 1. lower
 2. rise
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 9
(1 point)

Regarding the operation of 1KC-122 (KC Surge Tank Vent Valve):

1EMF-46A(B) in ____ (1) ____ will cause the valve to close.

When the alarm clears, the valve will be ____ (2) ____ re-opened.

Which ONE of the following completes the statements above?

- A. 1. Trip 1
 2. automatically
 - B. 1. Trip 1
 2. locally
 - C. 1. Trip 2
 2. locally
 - D. 1. Trip 2
 2. automatically
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 10
(1 point)

Given the following on Unit 1:

Initial Conditions:



Subsequently a loss of power occurs:



Based on the indications above:

- 1) A power loss has occurred on _____.
- 2) 1NC-27C _____ lost position indication.

Which ONE of the following completes the statement above?

- A. 1. KXA
2. has
 - B. 1. KXA
2. has NOT
 - C. 1. KXB
2. has
 - D. 1. KXB
2. has NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 11
(1 point)

Regarding the Reactor Protection System:

A loss of _____ will prevent operation of the Shunt Trip associated with Reactor Trip Bypass Breaker 1BYB.

Which ONE of the following completes the statements above?

- A. 1EVDA
 - B. 1EVDB
 - C. 1EVDC
 - D. 1EVDD
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 12
(1 point)

Given the following on Unit 1:

- Unit is operating at 70% RTP
- The OATC determines that AUTO rod withdrawal is not functioning
- Further investigation reveals that manual rod withdrawal is functioning normally
- Control Bank 'D' rods are currently at 190 steps

Which ONE of the following failures could cause this condition?

- A. PR Channel N-41 fails high.
 - B. Loop 2 ΔT Channel fails high.
 - C. Turbine Inlet Pressure Channel 1 fails low.
 - D. Turbine Inlet Pressure Channel 2 fails low.
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 13
(1 point)

Given the following on Unit 1:

- A LOCA has occurred
- Containment pressure is 5 PSIG and lowering
- Phase A and Phase B have NOT been reset

Based on the conditions above:

- 1) Phase A _____ reset if the Phase A reset pushbuttons are depressed.
- 2) Phase B _____ reset if the Phase B reset pushbuttons are depressed.

Which ONE of the following completes the statements above?

- A. 1. will
 2. will
 - B. 1. will
 2. will NOT
 - C. 1. will NOT
 2. will NOT
 - D. 1. will NOT
 2. will
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 14
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- 1D VL AHU is not available

Subsequently:

- A LOCA occurs on Unit 1
- Containment pressure rapidly rose to 2.8 PSIG and is now slowly lowering
- Significant damage was caused to the discharge ductwork of 1A and 1B VL AHUs such that normal air flow was interrupted
- 1C VL AHU tripped OFF

Based on the conditions above:

- 1) The _____ will lose cooling.
- 2) RV cooling water supply _____ be maintained for the VL AHUs.

Which ONE of following completes the statements above?

- A. 1. Control Rod Drive (VR) Enclosure
 2. will NOT
 - B. 1. Control Rod Drive (VR) Enclosure
 2. will
 - C. 1. Incore Instrumentation (VT) Room
 2. will
 - D. 1. Incore Instrumenation (VT) Room
 2. will NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 15
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- It has been determined that eight Ice Condenser Intermediate Deck doors will not open due to excessive ice buildup

Based on the conditions above, peak containment pressure following a Design Basis Accident will be reached ____ (1) ____ than normal.

Containment design pressure is ____ (2) ____ PSIG.

Which ONE of the following completes the statements above?

- A. 1. later
2. 3
 - B. 1. sooner
2. 3
 - C. 1. later
2. 15
 - D. 1. sooner
2. 15
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 16
(1 point)

Given the following on Unit 1:

- Unit is at 10% RTP
- 1AD-9/ A5 (ICE COND LOWER INLET DOORS OPEN) alarm is LIT
- The lower inlet door position display panel indicates that a door is OPEN
- An AO has confirmed a lower inlet door is cracked OPEN and the door will not move further OPEN and cannot be CLOSED
- The BOP has reported ice bed temperature is 25°F and slowly rising

Based on the conditions above:

- 1) The Action Statement of Tech Spec 3.6.12 (Ice Bed) _____ required to be entered.
- 2) The Action Statement of Tech Spec 3.6.13 (Ice Condenser Doors) _____ required to be entered.

Which ONE of the following completes the statement above?

- A. 1. is NOT
2. is NOT
 - B. 1. is
2. is
 - C. 1. is
2. is NOT
 - D. 1. is NOT
2. is
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 17
(1 point)

Given the following on Unit 2:

- A Large Break LOCA has occurred
- "B" train of NS has been aligned per ES-1.3 (TRANSFER TO COLD LEG RECIRC)
- 2NI-185A (2A ND PUMP SUCTION FROM CONT SUMP ISOL) failed to OPEN from the control room
- The crew is aligning ND aux spray as containment pressure continues to rise.

Based on the conditions above, 2NS-43A (2A ND HX OUTLET TO NS CONT OUTSIDE ISOL) ____ (1) ____ OPEN from the control room.

IF 2NS-43A is able to be aligned, it ____ (2) ____ receive an AUTOMATIC signal to CLOSE as containment pressure lowers.

Which ONE of the following completes the statements above?

- A. 1. will NOT
 2. does NOT
 - B. 1. will NOT
 2. does
 - C. 1. will
 2. does NOT
 - D. 1. will
 2. does
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 18
(1 point)

Given the following on Unit 1:

- A large break LOCA has occurred
- Containment pressure is 3.2 PSIG and slowly lowering
- The crew has transitioned to ES-1.3 (TRANSFER TO COLD LEG RECIRCULATION)

The MINIMUM containment sump level that will support alignment of the Containment Spray (NS) pumps is _____ feet.

Which ONE of the following completes the statement above?

- A. 1.0
 - B. 2.5
 - C. 3.0
 - D. 5.25
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 19
(1 point)

Given the following on Unit 1:

- Unit was at 100% RTP
- A Reactor Trip occurs
- The “B” Reactor trip breaker did not open
- ES-0.1 (REACTOR TRIP RESPONSE) is in progress

Based on the conditions above:

- 1) The Steam Dump _____ controller is in service.
- 2) The operator is required to reduce T_{AVG} to 557°F by selecting _____ mode.

Which ONE of the following completes the statements above?

- A. 1. Load Rejection
 2. T_{AVG}
 - B. 1. Load Rejection
 2. Steam Pressure
 - C. 1. Plant Trip
 2. T_{AVG}
 - D. 1. Plant Trip
 2. Steam Pressure
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 20
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP

Subsequently:

- 1A NCP trips

Based on the conditions above,

- 1) The 1A and 1B CF Pumps _____ trip.
- 2) The MDCA pumps will auto start if 2/4 detectors reach low-low level on a MINIMUM of _____ S/Gs.

Which ONE of the following completes the statements above?

- A. 1. will NOT
 2. 2/4
 - B. 1. will
 2. 1/4
 - C. 1. will NOT
 2. 1/4
 - D. 1. will
 2. 2/4
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 21
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- 1B NI pump is racked out and INOPERABLE for bearing replacement
- The 1A D/G has just been declared INOPERABLE due to an oil leak on the Woodward governor

Which ONE of the following describes an action which must be performed WITHIN ONE HOUR of declaring 1A D/G INOPERABLE to ensure compliance with TS 3.8.1 (AC SOURCES – OPERATING)?

- A. Perform PT/1/A/4350/025 (ESSENTIAL AUXILIARY POWER SYSTEM POWER SOURCE VERIFICATION)
 - B. Determine the OPERABLE 1B D/G is not INOPERABLE due to a common cause failure
 - C. Perform PT/1/A/4350/002 B (DIESEL GENERATOR 1B OPERABILITY TEST)
 - D. Declare 1A NI pump INOPERABLE, because it is a required redundant feature supported by the INOPERABLE 1A D/G
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 22
(1 point)

Given the following:

- Both Units were operating at 100% RTP

Subsequently:

- A Loss of Offsite Power occurs on Unit 1
- 1A D/G starts and loads as designed, 1B D/G fails to start
- 45 minutes have passed since the Loss of Offsite Power occurred

Based on the conditions above:

- 1) 125 VDC Distribution Center (EVDB) is _____.
- 2) AC Panelboard 1EKVB _____ automatically transfer to 1KRP if power is lost.

Which ONE of the following completes the statements above?

- A. 1. De-energized
 2. will
 - B. 1. Energized
 2. will
 - C. 1. De-energized
 2. will NOT
 - D. 1. Energized
 2. will NOT
-

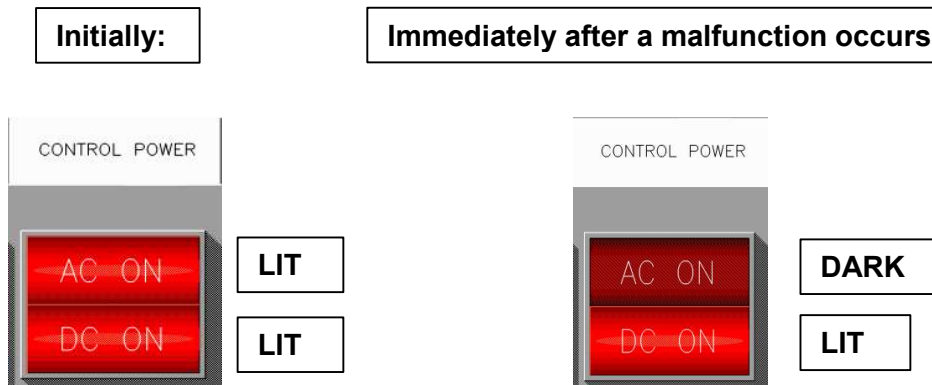
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ILT22-1 NRC MNS RO NRC Examination

Question: 23
(1 point)

Given the following on Unit 1:

- The Unit is at 100% RTP.
- Preparations for 1A D/G startup are in progress using PT/1/A/4350/002A, DIESEL GENERATOR 1A OPERABILITY TEST.
- Control Power indications on the 1A Diesel Generator Control Panel are as follows:



Based on the conditions above, the _____ breaker is the malfunction.

Which ONE of the following completes the statement above?

- A. 1ELXC Supply to 1EMXC
 - B. 1ELXD Supply to 1EMXD
 - C. 1ELXA Supply to 1EMXE
 - D. 1ELXB Supply to 1EMXF
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 24
(1 point)

Given the following on Unit 2:

- The 2A1 DG Starting Air Tank has been removed from service and depressurized to repair an air leak
- The 2A2 DG Starting Air Tank is at 230 PSIG

Based on the conditions above, the 2A DG is capable of a MINIMUM of ____ (1) ____ total starts.

During a DG start, the starting air solenoids receive a signal to close when DG speed is greater than or equal to a MINIMUM of ____ (2) ____.

Which ONE of the following completes the statements above?

- A. 1. 2
 2. 40%
 - B. 1. 2
 2. 95%
 - C. 1. 5
 2. 40%
 - D. 1. 5
 2. 95%
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 25
(1 point)

Given the following on Unit 2:

- Unit is in Mode 5 with the NC system vented
- Containment Purge System (VP) is operating

Based on the conditions above,

- 1) a Trip 2 on _____ will secure VP.
- 2) to restart the VP system after a Trip 2 alarm, _____ is/are required to be reset.

Which ONE of the following completes the statements above?

EMF LEGEND:

2EMF-36(L) (UNIT VENT GAS)

2EMF-38(L) (CONTAINMENT PARTICULATE)

- A.
 1. 2EMF-36
 2. Containment Ventilation (S_H) AND the EMF
 - B.
 1. 2EMF-38
 2. Containment Ventilation (S_H) AND the EMF
 - C.
 1. 2EMF-36
 2. Containment Ventilation (S_H) ONLY
 - D.
 1. 2EMF-38
 2. Containment Ventilation (S_H) ONLY
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 26
(1 point)

Given the following:

- 1A RN Pump is in service
- 2A RN Pump is in service
- A and B train RN is aligned to the Low Level Intake (LLI)

Subsequently:

- 1ETB normal incoming breaker inadvertently OPENS

Based on the conditions above:

- 1) 2A RN suction is aligned to the _____.
- 2) 2B RN suction is aligned to the _____.

Which ONE of the following completes the statements above?

- A. 1. LLI
 2. SNSWP
 - B. 1. SNSWP
 2. LLI
 - C. 1. SNSWP
 2. SNSWP
 - D. 1. LLI
 2. LLI
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 27
(1 point)

Given the following conditions:

- Unit 2 is at 100% RTP
- 'B' Train Components were in service.
- A Loss of Offsite Power occurs on both Units 1 and 2.

Based on the conditions above:

The _____ provide(s) the assured source of cooling water to the Unit 2 Containment AHUs.

Which ONE of the following completes the statement above?

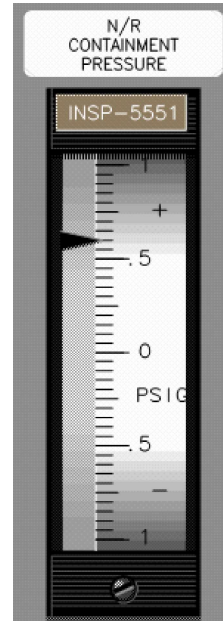
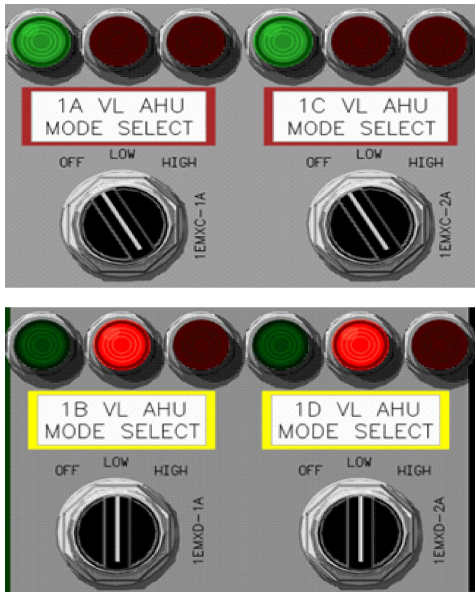
- A. RV pump selected in AUTO
 - B. 2A RN pump ONLY
 - C. 2B RN pump ONLY
 - D. 2A AND 2B RN pumps
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 28
(1 point)

Initial Unit 1 HVAC Panel
conditions:



Which ONE of the following lists the configuration of the Lower Containment (VL) Air Handling Units AFTER containment pressure rises to the conditions above?

- A. 1A – OFF
1C – OFF
1B – Low Speed
1D – Low Speed
- B. 1A – OFF
1C – OFF
1B – High Speed
1D – High Speed
- C. 1A – Low Speed
1C – Low Speed
1B – Low Speed
1D – Low Speed
- D. 1A – High Speed
1C – High Speed
1B – High Speed
1D – High Speed

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 29
(1 point)

Given the following:

- Unit 2 is at 100% RTP

Subsequently:

- A leak occurs on the steam equalization header
- Reactor power is 102% and rising slowly

Based on the conditions above, annunciator 2AD-2 C8, P/R OVER POWER ROD STOP ____ (1) ____ LIT.

If the reactor power excursion continues, a reactor trip will occur if Power Range NI's exceed a MINIMUM setpoint of ____ (2) ____.

Which ONE of the following completes the statements above?

- A. 1. is NOT
2. 109%
 - B. 1. is NOT
2. 103%
 - C. 1. is
2. 109%
 - D. 1. is
2. 103%
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 30
(1 point)

Given the following on Unit 2:

- Unit was at 100% RTP
- An inadvertent Reactor trip has occurred
- E-0 (REACTOR TRIP OR SAFETY INJECTION) has been implemented
- The following indications are observed:
 - One rod bottom light is NOT lit on DRPI
 - Reactor Trip and Bypass breakers are OPEN
 - IR Power is going DOWN

Per E-0, the OATC ____ (1) ____ required to manually trip the reactor.

Per ES-0.1 (REACTOR TRIP RESPONSE), emergency boration ____ (2) ____ be required to mitigate this event.

Which ONE of the following completes the statements above?

- A. 1. is NOT
 2. will
 - B. 1. is NOT
 2. will NOT
 - C. 1. is
 2. will
 - D. 1. is
 2. will NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 31
(1 point)

Given the following on Unit 1:

- A LOCA has occurred
- Containment hydrogen concentration is slowly rising
- The TSC has recommended placing the H2 Purge Blower in service

The H2 Purge Blower is placed in service to maintain hydrogen concentration less than a MAXIMUM of ____ (1) ____ %.

While in operation, the H2 Purge blower return line vents air from containment to the ____ (2) ____.

Which ONE of the following completes the statements above?

- A. 1. 4
2. Annulus
 - B. 1. 6
2. Annulus
 - C. 1. 4
2. Auxiliary Building
 - D. 1. 6
2. Auxiliary Building
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 32
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- "A" Train KC is in service
- 1A KF Pump is in service

Subsequently:

- The BOP reports that Unit 1 Spent Fuel Pool temperature is rising

The KF system is designed to maintain Spent Fuel pool temperature less than a MAXIMUM of ____ (1) ____ for the maximum heat load condition.

1KC-149 (A KF HX OUTLET FLOW) ____ (2) ____ AUTOMATICALLY reposition in order to attempt to lower Spent Fuel Pool temperature.

Which ONE of the following completes the statements above?

- A. 1. 90°F
 2. will NOT
 - B. 1. 140°F
 2. will NOT
 - C. 1. 90°F
 2. will
 - D. 1. 140°F
 2. will
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 33
(1 point)

Given the following on Unit 1:

- A fuel shuffle of irradiated fuel assemblies is in progress in Unit 1 Spent Fuel Pool

Subsequently,

- Control Room receives a 1RAD-3 F/5 "Cabinet Trouble" Alarm due to a loss of power to 1EMF-17 (SPENT FUEL BLDG REFUEL BRDG)
- Fuel movement operations have been suspended

Based on the conditions above, and

- 1) Per SLC 16.7.6 (RADIATION MONITORING FOR PLANT OPERATIONS), fuel movement operations _____ be recommenced with either a portable continuous monitor or RP continuous dose rate monitoring.
- 2) Per TS 3.7.12 (FUEL HANDLING VENTILATION EXHAUST SYSTEM), VF _____ required to be in FILTRATION Mode for the fuel shuffle.

Which ONE of the following completes the statements above?

- A. 1. can NOT
 2. is
 - B. 1. can NOT
 2. is NOT
 - C. 1. can
 2. is
 - D. 1. can
 2. is NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 34
(1 point)

Given the following on Unit 2:

- Unit is shutdown to MODE 3 in preparation for a refueling outage
- The operating crew has implemented OP/1/A/6100/SD-2 (COOLDOWN TO 400°F)
- The STM PRESS CONTROLLER is in "AUTO"
- NC T_{avg} is 553°F and STABLE

To continue the NC System cooldown, the BOP will be required to ____ (1) ____.

Maximum cooldown rate will be achieved when open status lights are lit for steam dump valves SB-3, ____ (2) ____, and SB-21.

Which ONE of the following completes the statements above?

- A. 1. place the "STM DUMP INTLK BYP" switches to the "BYP INTLK" position
 2. SB-9
 - B. 1. place the STM PRESS CONTROLLER in "M" and adjust the output
 2. SB-9
 - C. 1. place the "STM DUMP INTLK BYP" switches to the "BYP INTLK" position
 2. SB-12
 - D. 1. place the STM PRESS CONTROLLER in "M" and adjust the output
 2. SB-12
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 35
(1 point)

Given the following on Unit 1:

- The Unit is at 100% RTP
- OAC Alarm U1 Hydrogen Purity LO-LO has been received
- Hydrogen purity is currently 90% and lowering

Subsequently:

- The condition continues to degrade and the turbine is taken off-line

In order to prevent an explosive mixture of hydrogen and air, the generator will be rapidly purged of hydrogen using ____ (1) ____.

The primary source of hydrogen impurity is via the ____ (2) ____ system.

Which ONE of the following completes the statement above?

- A. 1. carbon dioxide
 2. LG (Generator Seal Oil)
 - B. 1. carbon dioxide
 2. KG (Generator Stator Cooling Water)
 - C. 1. nitrogen
 2. LG (Generator Seal Oil)
 - D. 1. nitrogen
 2. KG (Generator Stator Cooling Water)
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 36
(1 point)

Regarding the Main Feedwater System:

- 1) An individual CF pump will trip if its suction pressure lowers to less than a MINIMUM of _____ PSIG.
- 2) Both CF pumps will trip if _____ Condensate Booster pumps trip.

Which ONE of the following completes the statements above?

- A. 1. 230
 2. 2 / 3
 - B. 1. 330
 2. 3 / 3
 - C. 1. 230
 2. 3 / 3
 - D. 1. 330
 2. 2 / 3
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 37
(1 point)

Given the following:

- A release from Waste Gas Decay Tank 'C' is in progress
- EMF-50 (L) (WASTE GAS DISCHARGE) is declared INOPERABLE

The release is being monitored by ____ (1) ____.

If activity levels result in a Trip 2 on the monitoring EMF, the release ____ (2) ____ automatically terminate.

Which ONE of the following completes the statements above?

- A. 1. **2**EMF-36 (UNIT VENT GAS)
 2. will NOT
 - B. 1. **2**EMF-36 (UNIT VENT GAS)
 2. will
 - C. 1. **1**EMF-36 (UNIT VENT GAS)
 2. will NOT
 - D. 1. **1**EMF-36 (UNIT VENT GAS)
 2. will
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 38
(1 point)

Given the following:

- Maintenance requires shifting the Train A RN Suction to the RC Supply Crossover.

Based on the conditions above:

- 1) Alignment of RC Supply valves affects RN pump operation for _____.
- 2) Realignment of the RN pump discharge _____ be required.

Which ONE of the following completes the statements above?

- A. 1. Unit 1 ONLY
 2. will
 - B. 1. Unit 1 ONLY
 2. will NOT
 - C. 1. Unit 1 and Unit 2
 2. will NOT
 - D. 1. Unit 1 and Unit 2
 2. will
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 39
(1 point)

Given the following on Unit 1:

- Unit is at 40% RTP
- The crew observes NC system pressure lowering rapidly
- The reactor trip breakers are CLOSED
- The OATC observes the following annunciator status on 1FO-1:

	1	2	3	4	5	6	7
A					S/R HI FLUX RX TRIP	I/R HI FLUX RX TRIP	P/R HI FLUX RATE RX TRIP
B	S/G A LO-LO LVL RX TRIP	S/G B LO-LO LVL RX TRIP	S/G C LO-LO LVL RX TRIP	S/G D LO-LO LVL RX TRIP	PZR HI PRESS RX TRIP	PZR HI LVL RX TRIP	P/R HI FLUX HI STPT RX TRIP
C					PZR LO PRESS RX TRIP	PZR LO PRESS S/I RX TRIP	P/R HI FLUX LO STPT RX TRIP
D					HI CONT PRESS S/I RX TRIP	OPDT RX TRIP	OTDT RX TRIP
E	MANUAL S/I RX TRIP					MANUAL RX TRIP	SSPS GENERAL WARNING RX TRIP
F			LO FLO P7 PERMIS RX TRIP	LO FLO P8 PERMIS RX TRIP	TURB TRIP CAUSES RX TRIP	NC PUMP BUS UNDER FREQ RX TRIP	NC PUMP BUS UNDERVOLT RX TRIP

- The OATC successfully initiates a MANUAL reactor trip

Based on the conditions above:

- 1) The color of annunciator window 1FO-1/E-6 will be _____.
- 2) An ATWS _____ occurred.

Which ONE of the following completes the statements above?

1. RED
2. has NOT
1. WHITE
2. has NOT
1. RED
2. has
1. WHITE
2. has

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 40
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- Pressurizer pressure is 2150 PSIG and slowly lowering
- PRT pressure is 20 PSIG and slowly rising

For the conditions above, a leaking PORV is indicated by an RTD temperature of

_____.

Which ONE of the following completes the statements above?

- A. 647°F
 - B. 646°F
 - C. 259°F
 - D. 228°F
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 41
(1 point)

Given the following on Unit 2:

- A Reactor trip and Safety Injection has occurred
- The CRS has implemented E-0 (REACTOR TRIP OR SAFETY INJECTION)

Per E-0:

Safety Injection termination criteria for Heat Sink will be met if N/R level in at least one S/G is greater than a MINIMUM of (1) OR Total feed flow to the S/Gs is greater than a MINIMUM of (2) GPM.

Which ONE of the following completes the statement above?

- A. 1. 11%
 2. 450
 - B. 1. 11%
 2. 700
 - C. 1. 17%
 2. 450
 - D. 1. 17%
 2. 700
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 42
(1 point)

Given the following on Unit 1:

- A Large Break LOCA has occurred
- Containment pressure peaked at 3.5 PSIG and is currently 2.5 PSIG
- The CRS has implemented E-0 (REACTOR TRIP OR SAFETY INJECTION)

Per E-0, the crew _____ (1) _____ required to perform Enclosure 2 (PHASE B HVAC EQUIPMENT)

The Containment Air Return (VX) Isolation Damper Delta-P permissive _____ (2) _____ ensure that the dampers will NOT open during the initial blowdown phase of the event.

Which ONE of the following correctly completes the statements above?

- A. 1. is
 2. does
 - B. 1. is
 2. does NOT
 - C. 1. is NOT
 2. does
 - D. 1. is NOT
 2. does NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 43
(1 point)

Given the following on Unit 2:

- Unit is in MODE 1

Subsequently:

- The safety breaker to 2C NCP inadvertently OPENS
- The reactor did NOT trip
- The following Permissive Bistable Status light conditions are observed:
 - P-7 Lo Power Rx Trips Blocked – DARK
 - P-8 Hi Pwr Lo Flo Rx Trip Blocked – LIT
 - P-10 Nuclear At Power – LIT
 - P-13 Turbine Not At Power – LIT

Initial reactor power was ____ (1) ____ and plant response ____ (2) ____ as expected.

Which ONE of the following completes the statement above?

- A.
 - 1. less than 10%
 - 2. was
 - B.
 - 1. less than 10%
 - 2. was NOT
 - C.
 - 1. greater than 10%
 - 2. was
 - D.
 - 1. greater than 10%
 - 2. was NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

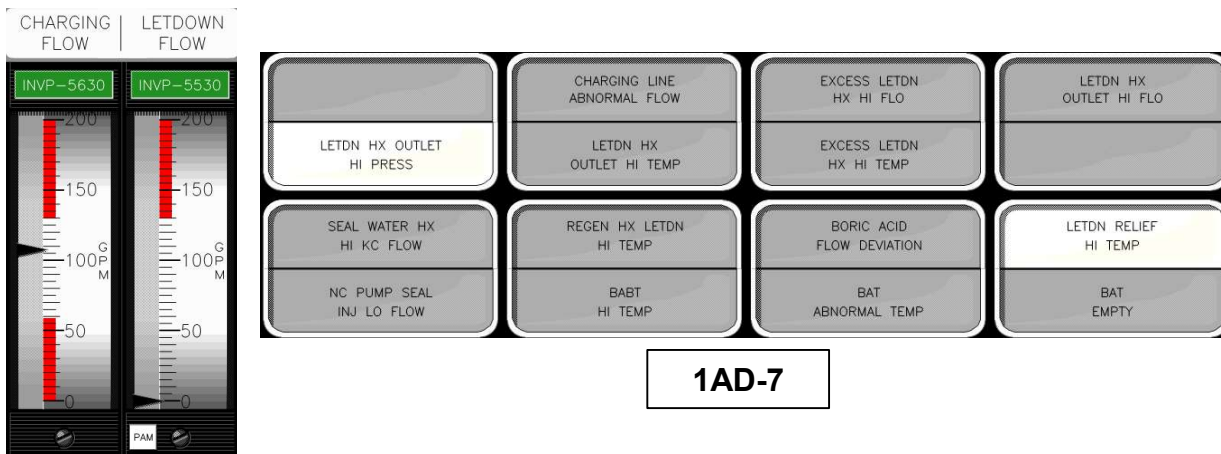
Question: 44
(1 point)

Given the following on Unit 1:

- Unit was operating at 100% RTP.

Subsequently:

- The crew enters AP/1/A/5500/12, LOSS OF LETDOWN, CHARGING OR SEAL INJECTION based on the following indications:



Based on the conditions above, an inadvertent closure of _____ has occurred.

- A. 1NV-1A (U1 NC L/D Isol To Regenerative Hx)
- B. 1NV-7B (U1 Letdown Cont Outside Isol)
- C. 1NV-124 (U1 Letdown Press Control)
- D. 1NV-459 (U1 Variable L/D Orifice Outlet Flow Cntrl)

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 45
(1 point)

Given the following on Unit 1:

- A leak has developed on the KC system
- 1AD-10 / C1 (KC SURGE TANK ABNORMAL LEVEL) is in alarm
- The CRS has implemented AP-21 (LOSS OF KC OR KC SYSTEM LEAKAGE)

Per AP-21:

- 1) The FIRST action directed to restore KC surge tank level is to initiate makeup to the Surge tank from the ____ (1) ____ system.
- 2) If initial makeup is not adequate to restore or stabilize surge tank level, aligning makeup from the ____ (2) ____ system is required.

Which ONE of the following completes the statements above?

- A. 1. YM
 2. RN
 - B. 1. YM
 2. NB
 - C. 1. NB
 2. RN
 - D. 1. NB
 2. YM
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 46
(1 point)

Given the following on Unit 2:

- A load increase is in progress
- The Pressurizer Pressure Master Controller **OUTPUT** fails LOW
- All Pressurizer Pressure control components are in AUTO
- NC system pressure is currently 2310 PSIG and rising slowly
- NO operator actions have been taken

Based on the conditions above,

- 1) PZR Surge Line Temperature is _____ .
- 2) 2NC-34A (PZR PORV) _____ open as pressure increases above setpoint.

Which ONE of the following completes the statements above?

- A. 1. lowering
 2. will
 - B. 1. lowering
 2. will NOT
 - C. 1. rising
 2. will
 - D. 1. rising
 2. will NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 47
(1 point)

Which ONE of the following is a COMPLETE list of breakers that is required to be OPENED by FR-S.1 (RESPONSE TO NUCLEAR POWER GENERATION/ATWS) to trip the reactor LOCALLY?

- A. Reactor Trip Breakers
 Reactor Trip Bypass Breakers
 M/G Set Generator breakers
 M/G Set Motor breakers
 - B. Reactor Trip Breakers
 Reactor Trip Bypass Breakers
 M/G Set Generator breakers
 - C. Reactor Trip Breakers
 Reactor Trip Bypass Breakers
 M/G Set Motor breakers
 - D. Reactor Trip Breakers
 Reactor Trip Bypass Breakers
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 48
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- A steam leak has occurred
- The CRS has implemented AP-01 (STEAM LEAK)

Per AP-01:

The OATC is required to reduce turbine load to maintain (1) less than or equal to 100% and NC Loop Delta-T's less than (2) D/T.

Which ONE of the following completes the statement above?

- A. 1. TPBE (Thermal Power Best Estimate)
 2. 58°F
 - B. 1. TPBE (Thermal Power Best Estimate)
 2. 60°F
 - C. 1. Excore NI's
 2. 58°F
 - D. 1. Excore NI's
 2. 60°F
-

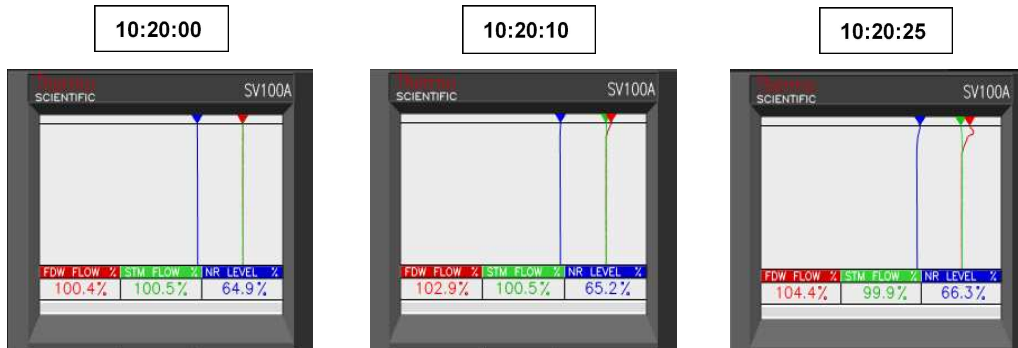
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ILT22-1 NRC MNS RO NRC Examination

Question: 49
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- 1A, 1B and 1C S/G Levels are at program level for the current power
- The following timeline is observed for 1D S/G CF flow and SM flow:



Based on the indications above, AP-06 is required to be entered due to a failure of ____ (1) ____.

S/G ____ (2) ____ level indication will indicate actual level trends first.

Which ONE of the following completes the statements above?

- A. 1. 1CF-17AB (1D S/G CF CONTROL)
2. W/R
- B. 1. 1CF-17AB (1D S/G CF CONTROL)
2. N/R
- C. 1. 1CF-107AB (1D S/G CF CONTROL BYPASS)
2. W/R
- D. 1. 1CF-107AB (1D S/G CF CONTROL BYPASS)
2. N/R

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 50
(1 point)

Given the following on Unit 1:

- A Loss of Offsite Power has occurred
- The crew is verifying natural circulation flow per G-1 (GENERIC ENCLOSURES) Enclosure 33 (NATURAL CIRCULATION PARAMETERS)

NC System **subcooling** > 0 °F _____ (1) required to support natural circulation flow.

NC System **hot leg temperature** at saturation temperature for S/G pressure _____ (2) support or indicate natural circulation.

Which ONE of the following completes the statements above?

- A. 1. is
 2. does NOT
 - B. 1. is
 2. does
 - C. 1. is NOT
 2. does NOT
 - D. 1. is NOT
 2. does
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 51
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- A loss of 1EKVA has occurred
- The CRS has implemented AP-15 (LOSS OF VITAL OR AUX CONTROL POWER)

Per AP-15, when checking 1EKVA ENERGIZED, the crew will check the _____.

This check is required to be performed early in the procedure due to _____.

Which ONE of the following completes the statements above?

- A.
 - 1. switch indication on any pump powered from 1ETA - LIT
 - 2. a loss of letdown and VCT makeup capability
 - B.
 - 1. switch indication on any pump powered from 1ETA - LIT
 - 2. an inadvertent start of the TDCA pump
 - C.
 - 1. top row of status lights - NORMAL
 - 2. a loss of letdown and VCT makeup capability
 - D.
 - 1. top row of status lights - NORMAL
 - 2. an inadvertent start of the TDCA pump
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 52
(1 point)

Given the following on Unit 2:

- A BLACKOUT has occurred on 2ETB
- D/G 2B failed to start due to an 86N relay actuation
- 2AD-11 / F4 (BATT EVCD UNDERVOLTAGE) is in alarm
- EVDD bus voltage is 113 VDC and lowering slowly

Per AP-07 (LOSS OF ELECTRICAL POWER), Enclosure 22 (SWAPPING BATTERY CHARGER POWER SUPPLIES), the action required to restore bus EVDD is to ____ (1) ____.

This action is required because vital control power batteries are analyzed to last a MAXIMUM of ____ (2) ____.

Which ONE of the following completes the statements above?

- A. 1. align Battery Charger EVCS to Bus EVDD
 2. one hour
 - B. 1. align Battery Charger EVCS to Bus EVDD
 2. 30 minutes
 - C. 1. swap Battery Charger EVCD power supply to 1EMXB
 2. one hour
 - D. 1. swap Battery Charger EVCD power supply to 1EMXB
 2. 30 minutes
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 53
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP
- B Train components in service

Subsequently,

- 1B RN pump trips on overcurrent
- The CRS implements AP-20 (LOSS OF RN)
- 1A RN pump is placed in service
- The BOP operator positions the manual loader for 1RN-190B (RN TO B KC HX CONTROL) to 10% open
- The OATC, monitoring the OAC graphic for RN, notes 1RN-190B is indicating full open

1RN-190B is indicating full OPEN because _____.

Which ONE of the following completes the statement above?

- A. minimum flow requirements for the 1B RN Pump are not met
 - B. minimum flow requirements for the 1A RN Pump are not met
 - C. the manual loader is bypassed when the 1B RN pump breaker is open
 - D. 1RN-190B is interlocked to open when the 1B RN pump breaker opens
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 54
(1 point)

Given the following on Unit 1:

- An instrument air leak is occurring
- VI pressure is 89 PSIG and lowering slowly
- An operator observes the following on 1AD-12:

	1	2	3	4	5
A	VI COMP PNL TROUBLE	KR PUMPS DISCH HDR HI PRESS	A RN PMP DISCHARGE LO PRESS	B RN PMP DISCHARGE LO PRESS	FWST OVERFLOW
B	BREATHING AIR LO PRESS	KR PUMPS DISCH HDR LO PRESS	SNSWP LO LEVEL	SNSWP LO-LO LEVEL	A RN PMP SUCTION HI PRESS
C	VI/VS LO PRESS	KR STORAGE TNK LO LVL	A RN PMP SUCTION LO PRESS	B RN PMP SUCTION LO PRESS	B RN PMP SUCTION HI PRESS
D	VI/VS LO-LO PRESS	RN STRNR A HI D/P	RN STRNR B HI D/P	FWST HI LVL	FWST LO TEMP
E	VI DRYERS PNL TROUBLE	A RN PUMP ABNORMAL FLOW	B RN PUMP ABNORMAL FLOW	FWST AT MAKEUP LEVEL	FWST LO-LO TEMP
F		RN TO KC HX A HI FLOW	RN TO KC HX B HI FLOW		FWST EMERGENCY LO TEMP

Based on the conditions above, VI ____ (1) ____ separated from VS.

Per AP-22 (Loss of VI), operators are required to be dispatched to restore VI using ____ (2) ____ VI compressors.

Which ONE of the following completes the statements above?

- A. 1. is NOT
2. A, B, C
- B. 1. is NOT
2. D, E, F
- C. 1. is
2. D, E, F
- D. 1. is
2. A, B, C

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 55
(1 point)

Given the following on Unit 1:

- Unit is at 45% RTP
- The Unit has entered AP-05 (GENERATOR VOLTAGE AND ELECTRIC GRID DISTURBANCES)
- Generator MVARs are NOT within the limits of the capability curve
- Generator MVARs are lagging

Based on the conditions above and per AP-05:

The operator will depress _____ (1) _____ on the "VOLTAGE ADJUST" pushbutton to adjust MVARs to within the capability curve.

IF unable to restore MVARs to within limits with the voltage regulator in AUTO or MAN, the crew will be required to _____ (2) _____.

Which ONE of the following completes the statements above?

- A. 1. LOWER
 2. trip the reactor
 - B. 1. LOWER
 2. trip the turbine
 - C. 1. RAISE
 2. trip the reactor
 - D. 1. RAISE
 2. trip the turbine
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 56
(1 point)

Given the following on Unit 1:

- A Large Break LOCA has occurred
- A and B ND pumps are NOT available
- The CRS has implemented ECA-1.1 (LOSS OF EMERGENCY COOLANT RECIRC) but NO actions have been taken
- Containment pressure is 8 PSIG and slowly rising
- FWST level is 145 inches and lowering

When the FWST Level LO setpoint of _____(1)_____ INCHES is reached, 1NI-184B (1B ND PUMP SUCTION FROM CONT SUMP ISOL) AND 1NI-185A (1A ND PUMP SUCTIONFROM CONT SUMP ISOL) _____(2)_____ automatically OPEN.

Which ONE of the following completes the statement above?

- A. 1. 95
 2. will NOT
 - B. 1. 95
 2. will
 - C. 1. 135
 2. will NOT
 - D. 1. 135
 2. will
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 57
(1 point)

Given the following on Unit 1:

- A runback from 100% RTP has occurred
- During the runback, control rod M-12 became stuck

AP-14 (ROD CONTROL MALFUNCTION) requires a shutdown margin calculation to be performed within a MINIMUM of ____ (1) ____ anytime rods are misaligned greater than a MINIMUM of ____ (2) ____ steps, per T.S 3.1.4 (ROD GROUP ALIGNMENT LIMITS).

Which ONE of the following completes the statements above?

- A. 1. 30 minutes
 2. 12
 - B. 1. 30 minutes
 2. 24
 - C. 1. one hour
 2. 12
 - D. 1. one hour
 2. 24
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 58
(1 point)

Given the following on Unit 2:

- Unit is in MODE 5
- Source Range Nuclear Instrument count rates are rising
- The CRS implements AP-38 (EMERGENCY BORATION AND RESPONSE TO INADVERTENT DILUTION)
- All attempts to OPEN 2NV-265B (U2 NV PUMP BORIC ACID SUP ISOL) have been unsuccessful

Per AP-38:

- 1) The crew will NEXT attempt to establish emergency boration ____ (1) ____.
- 2) A MINIMUM of ____ (2) ____ directed to be started.

Which ONE of the following completes the statements above?

COMPONENT LEGEND:

2NV-269 (UNIT 2 EMERGENCY BORATION VALVE))

2NV-267A (BORIC ACID TO BLENDER CONTROL)

- A.
 1. locally using 2NV-269 and 2NV-267A
 2. two Boric Acid pumps are
 - B.
 1. locally using 2NV-269 and 2NV-267A
 2. one Boric Acid pump is
 - C.
 1. by swapping NV suction to the FWST
 2. two Boric Acid pumps are
 - D.
 1. by swapping NV suction to the FWST
 2. one Boric Acid pump is
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 59
(1 point)

Given the following on Unit 2:

- Power Range NIs indicate 47%
- T_{avg} is 571°F
- Pressurizer level on all channels indicates 43.5%

Based on the conditions above:

- 1) 2AD-6 / C7 (PZR HI LEVEL DEV CONTROL) _____ lit.
- 2) A malfunction has occurred affecting Selected _____ output.

Which ONE of the following completes the statement above?

- A. 1. is NOT
 2. Pzr Level 2
 - B. 1. is NOT
 2. Pzr Level 1
 - C. 1. is
 2. Pzr Level 2
 - D. 1. is
 2. Pzr Level 1
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 60
(1 point)

Given the following on Unit 2:

- A tube leak has been identified on 2B S/G
- The CRS has implemented AP-10 (NC SYSTEM LEAKAGE WITHIN THE CAPACITY OF BOTH NV PUMPS), Case I (STEAM GENERATOR TUBE LEAKAGE)

Per AP-10:

- 1) Charging flow is required to be maintained less than a MAXIMUM of _____ GPM at all times.
- 2) A S/G Tube Rupture will be indicated by the inability to maintain Pressurizer level above a MINIMUM of _____.

Which ONE of the following completes the statements above?

- A. 1. 200
 2. 4%
 - B. 1. 200
 2. 11%
 - C. 1. 232
 2. 4%
 - D. 1. 232
 2. 11%
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 61
(1 point)

Given the following on Unit 1:

- Unit is at 85% RTP
- Main condenser vacuum is 24.5" Hg and degrading
- The CRS has implemented AP-23 (LOSS OF CONDENSER VACUUM)

Control Interlock (C-9) will block the ability to dump steam to the condenser when condenser vacuum degrades to less than a MAXIMUM of ____ (1) ____ inches Hg.

Per AP-23 basis, the reason for tripping the Main Turbine on loss of Condenser vacuum is to ____ (2) ____.

Which ONE of the following completes the statement above?

- A. 1. 23
 2. minimize low pressure turbine blading damage
 - B. 1. 23
 2. prevent turbine exhaust hood overheating
 - C. 1. 20
 2. minimize low pressure turbine blading damage
 - D. 1. 20
 2. prevent turbine exhaust hood overheating
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 62
(1 point)

Given the following:

- Both Units are at 100% RTP
- Unit 1 operators are performing a 500 gallon dilution for temperature control

Subsequently:

- AP-17 (LOSS OF CONTROL ROOM) is implemented due to toxic gas entering the control room
- The control room is IMMEDIATELY evacuated (NO Operator actions are performed)

Per AP-17:

- 1) An operator is required to secure the Reactor Makeup Water pump from the _____ panel.
- 2) S/G levels will be maintained within the specified range by _____.

Which ONE of the following completes the statements above?

- A.
 1. local Reactor Makeup Water pump
 2. manually throttling the motor operated isolation valves in the doghouses
 - B.
 1. Aux Shutdown
 2. manually throttling the motor operated isolation valves in the doghouses
 - C.
 1. local Reactor Makeup Water pump
 2. adjusting the manual loaders at the local CA pump panels
 - D.
 1. Aux Shutdown
 2. adjusting the manual loaders at the local CA pump panels
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 63
(1 point)

Given the following on Unit 1:

- FR-C.2 (RESPONSE TO DEGRADED CORE COOLING) has been implemented
- NC pumps 1B and 1C are in service
- Reactor vessel dynamic D/P is 3% less than required and lowering
- The crew has just completed depressurizing the S/Gs to 190 PSIG

Based on the conditions above and per FR-C.2, _____(1)_____ NC pump(s) will be secured _____(2)_____.

Which ONE of the following completes the statement above?

- A. 1. all
 2. due to anticipated loss of #1 seal requirements
 - B. 1. all
 2. to reduce the loss of inventory
 - C. 1. ONLY 1B
 2. due to anticipated loss of #1 seal requirements
 - D. 1. ONLY 1B
 2. to reduce the loss of inventory
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 64
(1 point)

Given the following on Unit 1:

- A LOCA has occurred
- The CRS has implemented ES-1.2 (POST LOCA COOLDOWN AND DEPRESSURIZATION)
- NC system pressure is 1600 PSIG
- Pzr level is 15%
- Containment pressure peaked at 2.8 PSIG

Per ES-1.2:

- 1) When directed to initiate depressurization, the crew will use _____.
- 2) NC depressurization can be secured when Pzr level exceeds a MINIMUM value of _____.

Which ONE of the following completes the statements above?

- A.
 1. normal PZR spray valves
 2. 50%
 - B.
 1. normal PZR spray valves
 2. 25%
 - C.
 1. a single PZR PORV
 2. 50%
 - D.
 1. a single PZR PORV
 2. 25%
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 65
(1 point)

Given following on Unit 1:

- 0600 A Reactor trip occurred from 100% RTP due to a large steam break
0800 The steam break has been isolated and the unit stabilized with the following conditions:
- NC system TColds = 220°F
 - NC system Pressure = 1300 PSIG
 - NC Pressure/Temperature is to the right of the P/T Limit A curve

Based on the conditions above, FR-P.1 (RESPONSE TO IMMINENT PRESSURIZED THERMAL SHOCK CONDITION) _____(1)_____ required to be entered.

Per AD-OP-MNS 1001 (MNS CONDUCT OF ABNORMAL OPERATION), CSF status trees should be monitored _____(2)_____.

Which ONE of the following completes the statements above?

- A. 1. is NOT
 2. every 10-15 minutes
 - B. 1. is NOT
 2. continuously
 - C. 1. is
 2. every 10-15 minutes
 - D. 1. is
 2. continuously
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 66
(1 point)

Per AD-OP-ALL-1000 (CONDUCT OF OPERATIONS):

- 1) The RO is required to perform an end to end control panel walk-down approximately every _____ hours during the shift.
- 2) The walk-down _____ required to be logged in the Narrative Logbook.

Which ONE of the following completes the statements above?

- A.
 1. two
 2. is
 - B.
 1. two
 2. is NOT
 - C.
 1. six
 2. is
 - D.
 1. six
 2. is NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 67
(1 point)

Given the following on Unit 1:

- Unit is at 100% RTP

Subsequently:

- NC system Tavg is lowering
- Steam header pressure is lowering
- Excore NI's indicate 101% and slowly rising

Per AD-OP-MNS-1001 (MNS CONDUCT OF ABNORMAL OPERATIONS), for transient load changes:

- 1) The operator will immediately reduce turbine load up to a MAXIMUM of _____ and then reduce as needed to maintain power less than the pre-transient condition.
- 2) To control the plant more precisely, the operators should monitor _____ for reactor response.

Which ONE of the following completes the statements above?

- A. 1. 20 MWe
2. Thermal Power Best Estimate (TPBE)
 - B. 1. 20 MWe
2. NC Loop delta Ts
 - C. 1. 25 MWe
2. Thermal Power Best Estimate (TPBE)
 - D. 1. 25 MWe
2. NC Loop delta Ts
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 68
(1 point)

Per AD-HS-ALL-0103 (FALL PROTECTION):

- 1) Continuous Fall Protection (100% tie-off) is required when there is a free-fall risk of greater than or equal to a MINIMUM of _____ feet above a working or walking surface.
- 2) A body belt _____ be used to meet Personal Fall Arrest System (PFAS) requirements.

Which ONE of the following completes the statements above?

- A. 1. 4
 2. can
 - B. 1. 4
 2. can NOT
 - C. 1. 10
 2. can
 - D. 1. 10
 2. can NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 69
(1 point)

Per AD-OP-ALL-0204 (PLANT STATUS CONTROL):

- 1) Test Tags (TST) will be _____ in color.
- 2) Components with Test Tags _____ be manipulated with concurrence from the Test Lead.

Which ONE of the following completes the statements above?

- A.
 1. blue
 2. can
 - B.
 1. blue
 2. can NOT
 - C.
 1. gray
 2. can
 - D.
 1. gray
 2. can NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 70
(1 point)

Given the following on Unit 1:

- Unit shutdown and cooldown in progress
- NC System Tavg is 325°F

Per T.S 1.1 (Definitions), Unit 1 is in ____ (1) ____.

Based on the current status of Unit 1, ____ (2) ____ train(s) of ECCS shall be OPERABLE.

Which ONE of the following completes the statements above?

- A. 1. MODE 3
 2. two
 - B. 1. MODE 3
 2. one
 - C. 1. MODE 4
 2. two
 - D. 1. MODE 4
 2. one
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 71
(1 point)

Regarding performance of surveillance procedures:

Per AD-OP-ALL-0112 (OPERATIONS LOG KEEPING AND CHART RECORDERS), a log entry is required for ____ (1) ____ of surveillance testing.

Per AD-OP-ALL-0201 (PROTECTED EQUIPMENT), a routine surveillance with a testing interval of six months ____ (2) ____ be performed on protected equipment.

Which ONE of the following completes the statements above?

- A. 1. completion ONLY
 2. can NOT
 - B. 1. initiation AND completion
 2. can NOT
 - C. 1. completion ONLY
 2. can
 - D. 1. initiation AND completion
 2. can
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 72
(1 point)

Per PD-RP-ALL-0001, When exiting the RCA:

- 1) After two consecutive Personnel Contamination Monitor (PCM) alarms, a worker _____ exit the RCA after RP performs a “whole body” frisk.
- 2) The preferred method for monitoring hard hats and safety glasses is to _____.

Which ONE of the following completes the statement above?

- A.
 1. can NOT
 2. place them in the Tool and Equipment Monitor (TEM)
 - B.
 1. can NOT
 2. wear them through the PCM
 - C.
 1. can
 2. place them in the Tool and Equipment Monitor (TEM)
 - D.
 1. can
 2. wear them through the PCM
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 73
(1 point)

Per PD-RP-ALL-0001 (RADIATION WORKER RESPONSIBILITIES), regarding the use of Self-Reading Dosimeters (SRD):

- 1) Reading the SRD is required at a MINIMUM of _____ while inside a High Radiation Area (HRA) or Locked High Radiation Area (LHRA).
- 2) If a DOSE RATE alarm setpoint is exceeded, the alarm _____ clear when the dose rate drops below 80% of the setpoint.

Which ONE of the following completes the statements above?

- A.
 1. once per hour
 2. will
 - B.
 1. once per hour
 2. will NOT
 - C.
 1. every 15 minutes
 2. will
 - D.
 1. every 15 minutes
 2. will NOT
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 74
(1 point)

Per AP-47 (SECURITY EVENTS):

- 1) AP-47 _____ provide operator actions for a confirmed unexploded bomb on site event.
- 2) AP-47 _____ designated as proprietary information.

Which ONE of the following completes the statements above?

- A.
 1. does
 2. is NOT
 - B.
 1. does
 2. is
 - C.
 1. does NOT
 2. is NOT
 - D.
 1. does NOT
 2. is
-

McGuire Nuclear Station

ILT22-1 NRC MNS RO NRC Examination

Question: 75
(1 point)

Per AP-17 (LOSS OF CONTROL ROOM):

- 1) Prior to control room evacuation, operators _____ required to trip BOTH Main Feed pumps.
- 2) The operator dispatched to the Reactor Trip breakers _____ required to be a Reactor Operator.

Which ONE of the following completes the statements above?

- A. 1. are NOT
 2. is NOT
 - B. 1. are NOT
 2. is
 - C. 1. are
 2. is NOT
 - D. 1. are
 2. is
-

Reference List for ILT22-1 NRC MNS RO NRC Examination

Steam Tables

Examination KEY
ILT22-1 NRC MNS RO NRC Examination

<i>Q</i>	<i>A</i>	<i>Q</i>	<i>A</i>	<i>Q</i>	<i>A</i>	<i>Q</i>	<i>A</i>
1	D	26	A	51	C		
2	D	27	B	52	C		
3	B	28	D	53	A		
4	C	29	A	54	C		
5	D	30	D	55	B		
6	B	31	A	56	B		
7	A	32	B	57	C		
8	C	33	C	58	B		
9	D	34	C	59	B		
10	A	35	A	60	A		
11	D	36	C	61	C		
12	C	37	D	62	C		
13	A	38	C	63	A		
14	B	39	D	64	B		
15	D	40	C	65	D		
16	D	41	A	66	B		
17	A	42	A	67	B		
18	C	43	C	68	B		
19	B	44	C	69	C		
20	C	45	A	70	D		
21	A	46	D	71	B		
22	D	47	A	72	B		
23	C	48	D	73	C		
24	C	49	A	74	B		
25	B	50	A	75	A		